Amendments to the Claims

Please amend claims to be as follows.

1. (currently amended) A method of fault recovery by a switch in a local area network, the method comprising:

detecting a link failure at a port of the switch; and clearing all medium access control (MAC) address entries from a MAC address table of the switch in response to the link failure detection.

- 2. (currently amended) The method of claim 1, wherein clearing <u>all MAC address</u> entries from the <u>MAC</u> address table causes a discovery process to fill the table to begin immediately.
- (original) The method of claim 1, further comprising:
 momentarily dropping a link on another port of the switch.
- 4. (original) The method of claim 3, wherein momentarily dropping the link on the other port causes propagation of the link failure to a next switch.
- 5. (currently amended) The method of claim 1, wherein the <u>MAC</u> address table is cleared <u>of all MAC</u> address entries by overwriting each entry in the table with a template from a register.
- 6. (currently amended) The method of claim 1, wherein the <u>MAC</u> address table is cleared <u>of all MAC</u> address entries by momentarily turning off power within the switch.

- 7. (original) The method of claim 3, wherein the link is momentarily dropped for a length of time sufficient for a next switch to detect the link drop.
- 8. (original) The method of claim 7, wherein the length of time is no more than fifty milliseconds.
- 9. (original) The method of claim 7, wherein the length of time is under ten milliseconds.
- 10. (currently amended) A network apparatus comprising:
 - a medium access control (MAC) address table; and
 - a plurality of ports wherein at least one port is configured to implement
 implements a link-loss-learn protocol wherein upon detecting a link
 failure at the port, the MAC address table is cleared of all MAC address
 entries therein.
- 11. (currently amended) The apparatus of claim 10, wherein the link-loss-learn protocol comprises, upon detecting a link failure at the port, flushing the MAC address table so as to immediately begin a discovery process upon clearing all MAC address entries from the MAC address table, a discovery process is begun by the apparatus.
- 12. (currently amended) The apparatus of claim 11, wherein the link-loss-learn protocol further comprises, upon detecting the link failure at the port, momentarily dropping links on other ports of the apparatus that are configured to which implement the link-loss-learn protocol so as to propagate the link failure.
- 13. (original) The apparatus of claim 12, wherein the apparatus comprises a multi-port Ethernet switch.

- 14. (currently amended) A network comprising:
 - a plurality of Ethernet switches in a redundant topology,
 - wherein at least one switch is configured to implement implements a link-loss-learn protocol for rapid fault recovery,
 - wherein the link-loss-learn protocol comprises, upon detecting a link failure at a port of the switch, clearing a medium access control (MAC) address table of all MAC address entries therein.
- 15. (currently amended) The network of claim 14, wherein the link loss learn protocol comprises, upon detecting a link failure at a port of the switch, flushing a MAC address table of the switch upon clearing all MAC address entries from the MAC address table, a discovery process is begun by the switch.
- 16. (currently amended) The network of claim 15, wherein the link-loss-learn protocol further comprises, upon detecting the link failure at the port, momentarily dropping links on other ports of the switch that are configured to implement implements the link-loss-learn protocol.